

CLAIMS

1. A method for communicating among at least two devices over a data network,
the method comprising:

5 establishing a voice communications session in a session over a data link
between a first station and at least one remote station, the session operating in a first
mode that is one of a simplex mode and a duplex mode;

 sending a control command over the data link to change from the first mode to
a second mode, the second mode being a mode different from the first mode; and

10 changing, while maintaining the session, the session from the first mode to the
second mode.

2. The method according to claim 1, further comprising:

 accepting a request from a third station for a simplex communications session
15 with the first station; and

 responding at the first station to the request by establishing a simplex session
from the first station to the third station while maintaining the voice communications
session.

20 3. The method according to claim 1, wherein the data link comprises a data link
based upon an Internet Protocol.

4. The method according to claim 3, wherein at least one of the control command and messages used for maintaining the session comprise at least one message defined by at least one of Session Initiation Protocol and Session Description Protocol.
- 5 5. A method for communicating among at least three devices, the method comprising:
- establishing a duplex communications session over a data link between a first station and a second station;
- accepting a request from a third station for a simplex communications session
- 10 with the first station; and
- responding at the first station to the request by establishing a simplex session from the first station to the third station while maintaining the duplex communications session.
- 15 6. The method according to claim 5, wherein the simplex session comprises one of a text message transmission and a simplex voice call session.
7. The method according to claim 5, wherein messages defined under a Session Initiation Protocol are used for at least one of establishing the simplex session and
- 20 maintaining the duplex communications session.
8. The method according to claim 5, wherein the data link comprises a data link based upon an Internet Protocol.

9. The method according to claim 8, wherein the request comprises at least one message defined by at least one of Session Initiation Protocol and Session Description Protocol.

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10. A wireless communications controller, comprising:

a call initiation controller that establishes a voice communications session in a session over a data link between a first station and at least one remote station, the session operating in a first mode that is one of a simplex mode and a duplex mode;

10 a mode change controller that performs one of sending and receiving a control command over the data link to change from the first mode to a second mode, the second mode being a mode different from the first mode; and

a mode controller that changes, while maintaining the session, the session from the first mode to the second mode.

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11. The wireless communications controller according to claim 10, wherein the data link comprises a data link based upon the Internet Protocol;

12. The wireless communications controller according to claim 10, wherein the control command comprises at least one message defined by at least one of Session Initiation Protocol and Session Description Protocol.

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13. The wireless communications controller according to claim 10, further comprising at least one of a network server and a wireless device, the at least one network server and wireless device operating to perform voice communications among at least two stations.

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14. A wireless communications controller, comprising:

a call initiation controller that establishes a duplex communications session over a data link between a first station and a second station;

a call request receiver that accepts a request from a third station for a simplex
10 communications session with the first station; and

a second call session controller that responds to the request by establishing a simplex session from the first station to the third station while maintaining the duplex communications session.

15 15. The wireless communications controller according to claim 14, wherein the simplex session comprises one of a text message transmission and a simplex voice call session.

16. The wireless communications controller according to claim 14, wherein
20 messages defined under a Session Initiation Protocol are used for at least one of establishing the simplex session and maintaining the duplex communications session.

17. The wireless communications controller according to claim 14, wherein the data link comprises a data link based upon an Internet Protocol.

18. The wireless communications controller according to claim 17, wherein the
5 request comprises at least one message defined by at least one of Session Initiation Protocol and Session Description Protocol.

19. A computer program product comprising computer programming instructions for controlling communication among at least two devices over a data network, the
10 computer programming instructions comprising instructions for:

establishing a voice communications session in a session over a data link between a first station and at least one remote station, the session operating in a first mode that is one of a simplex mode and a duplex mode;

15 sending a control command over the data link to change from the first mode to a second mode, the second mode being a mode different from the first mode; and

changing, while maintaining the session, the session from the first mode to the second mode.

20. The computer program product according to claim 19, wherein at least one of
20 the control command and messages used for maintaining the session comprise at least one message defined by at least one of Session Initiation Protocol and Session Description Protocol.